

SEQUENCE LISTING

<110> BARBOUR, ALAN G.
CARTER, CAROL

<120> A DIAGNOSTIC TEST FOR INFECTION WITH A SPIROCHETE BORNE
BY AMBLYOMMA AMERICANUM

<130> UTSK:352USC1

<140> UNKNOWN
<141> 2003-07-14

<150> 08/437,013
<151> 1995-05-08

<150> 09/275,506
<151> 1999-03-24

<160> 28

<170> PatentIn Ver. 2.1

<210> 1
<211> 641
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1
acatattcag atgcagacag aggttctatt caaattgaaa ttgaacaact tacagatgaa 60
attnaacagag ttgctgatca ggctcaatac aaccagatgc atatgttatac taacaaatca 120
tctgctcaaa atgtaaaaac tgctgaagag cttggaatgc aacctgcaaa aattaataca 180
ccagcatcac taactggagc acaagcttca tggacattga gagttcaggt aggtgcaaat 240
caggatgaag caattgctgt taatatttgc tcaactaatg ttgcaaatct ttttggtgaa 300
gaaggtgttc aagcggctcc agctcaagag ggtgcacaac aggagggagt tcaaccagct 360
ccagctcaag gtgggattag ctctccaatt aatgttacaa ctgctattga tgctaatgca 420
tcgcttacaa agattgaaga tgctattaga atggtaactg atcaaagagc aaatcttgg 480
gctttccaaa atagacttga gtctgttaaa gctagcacag attatgctat tgaaaactta 540
aaagcgtctt atgctcaat taaagatgca ataatgacag atgaaattgt agcatctaca 600
accaacagta ttttgacaca atctgcaatg gctatgattg c 641

<210> 2
<211> 213

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 2

Thr Tyr Ser Asp Ala Asp Arg Gly Ser Ile Gln Ile Glu Ile Glu Gln
1 5 10 15

Leu Thr Asp Glu Ile Asn Arg Val Ala Asp Gln Ala Gln Tyr Asn Gln
20 25 30

Met His Met Leu Ser Asn Lys Ser Ser Ala Gln Asn Val Lys Thr Ala
35 40 45

Glu Glu Leu Gly Met Gln Pro Ala Lys Ile Asn Thr Pro Ala Ser Leu
50 55 60

Thr Gly Ala Gln Ala Ser Trp Thr Leu Arg Val Gln Val Gly Ala Asn
65 70 75 80

Gln Asp Glu Ala Ile Ala Val Asn Ile Phe Ser Thr Asn Val Ala Asn
85 90 95

Leu Phe Gly Gly Glu Gly Val Gln Ala Ala Pro Ala Gln Glu Gly Ala
100 105 110

Gln Gln Glu Gly Val Gln Pro Ala Pro Ala Gln Gly Gly Ile Ser Ser
115 120 125

Pro Ile Asn Val Thr Thr Ala Ile Asp Ala Asn Ala Ser Leu Thr Lys
130 135 140

Ile Glu Asp Ala Ile Arg Met Val Thr Asp Gln Arg Ala Asn Leu Gly
145 150 155 160

Ala Phe Gln Asn Arg Leu Glu Ser Val Lys Ala Ser Thr Asp Tyr Ala
165 170 175

Ile Glu Asn Leu Lys Ala Ser Tyr Ala Gln Ile Lys Asp Ala Ile Met
180 185 190

Thr Asp Glu Ile Val Ala Ser Thr Thr Asn Ser Ile Leu Thr Gln Ser
195 200 205

Ala Met Ala Met Ile

<210> 3
<211> 1336
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 3
ctggcagtgc gtcttaagca tgcaagtcag acggaatgta gtaatacatt cagtggcgaa 60
cgggtgagta acgcgtggat aatctgccta cgagatgggg ataactatta gaaataatag 120
ctaataccga ataaagtcaa ttgagttgtt agttgatgaa aggaagcctt taaagcttcg 180
ctttagatg agtctgcgtc ttattagcta gttggtaggg taagagccta ccaaggctat 240
gataagtaac cggcctgaga gggtgatcg tcacactgga actgagatac ggtccagact 300
cctacgggag gcagcagcta agaatcttcc gcaatggcg aaagcctgac ggagcgacac 360
tgcgtgaacg aagaaggctg aaagattgta aagttcttt ataaatgagg aataagcttt 420
gtaggaaatg acaaggtgat gacgtaatt tatgaataag ccccggtctaa ttacgtgcca 480
gcagccgcgg taatacgtaa gggcgagcg ttgttcggga tcattggcg taaagggtga 540
gtaggcggat atgttaagtct atgtgtaaaa taccacggct caactgtgga actatgctag 600
aaactgcattg actagagtct gataggggaa gttagaattc ctgggtgtaag ggtggaatct 660
gttgatatac ggaagaatac cagaggcgaa agcgaacctc taggtcaaga ctgacgctga 720
gtcacgaaag cgtagggagc aaacaggatt agataccctg gtatgttacg ctgtaaacgaa 780
tgcacacttgcgtttaatcg aaaggttagt accgaagcta acgtgttaag tgtgcgcct 840
ggggagttatg ctcgcaagag tgaaactcaa aggaattgac gggggcccgca acaagcggtg 900
gagcatgtgg tttaattcga tgatacgcga ggaaccttac cagggcttga catatacagg 960
atatagttag agataactac tctccgtttg gggtctgtat acaggtgtctg catgggtgtc 1020
gtcagctcgt gctgtgaggt gttgggttaa gtcccgcaac gagcgcaacc cttgttgtct 1080
gttaccagca tggactcaga cgagactgcc ggtgataagc cggagaaagg 1140
tgaggatgac gtcaaatcat catggccctt atgtcctggg ctacacacgt gctacaatgg 1200
cctgtacaaa gcgatgcgaa acagtgtatgt gaagcaaaac gcataaaagca ggtctcagtc 1260
cagattgaag tctgaaactc gacttcatga agttggaaatc gctagtaatc gtatatcaga 1320
atgatacggtaatc 1336

<210> 4
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 4

aactgctgaa gagcttggaa tgcaacctgc aaaaattaat acaccagcat cactaactgg 60
agcacaagct tcatggacat tgagagttca ggttaggtgca aatcaggatg aagcaattgc 120
tgttaatatt ttctcaacta atgttgcaaa tcttttggt ggagaagggtg ttcaagcggc 180
tccagctcaa gagggtgcac aacaggaggg agttcaacca gctccagctc aagggtggat 240
tagctctcca attaatgtta caactgctat tgatgctaat gcatcgctta caaagattga 300
agatgctatt agaatggtaa ctgatcaaag 330

<210> 5
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 5
Gly Val Gln Ala
1

<210> 6
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 6
tctgctcaa 9

<210> 7
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 7
ggtgttcaag cg 12

<210> 8
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 8
gttcaaccag ct 12

<210> 9
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 9
aacagctgaa gagcttgaa tg 22

<210> 10
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 10
cgataatctt actattcact agtttc 26

<210> 11
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 11
acatattcag atgcagacag aggt

24

<210> 12
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 12
tgttagacgt taccgttact aacg

24

<210> 13
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 13
ctggcagtgc gtcttaagca

20

<210> 14
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 14
catatagtct tactatgccca cttag

25

<210> 15
<211> 31
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 15

Leu Arg Val Gln Val Gly Ala Asn Gln Asp Glu Ala Ile Ala Val Asn
1 5 10 15

Ile Phe Ser Thr Asn Val Ala Asn Leu Phe Gly Gly Glu Gly Val
20 25 30

<210> 16

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 16

Gln Ala Ala Pro Ala Gln Glu Gly Ala Gln Gln Glu Gly Val Gln Pro
1 5 10 15

<210> 17

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 17

Ala Pro Ala Gln Gly Gly Ile Ser Ser Pro Ile Asn Val Thr Thr Ala
1 5 10 15

Ile Asp Ala Asn

20

<210> 18

<211> 7

<212> PRT

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 18
Ala Ala Pro Ala Pro Ala Ala
1 5

<210> 19
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 19
Ala Thr Pro Ala Pro Val Ala
1 5

<210> 20
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 20
Ala Ala Pro Ala Pro Ala Ser
1 5

<210> 21
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 21
Ala Gln Ala Ala

1

<210> 22
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Peptide

<400> 22
Pro Thr Pro Ala Thr
1 5

<210> 23
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Peptide

<400> 23
Pro Ala Pro Val Thr
1 5

<210> 24
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Peptide

<400> 24
Ala Gln Thr Ala
1

<210> 25
<211> 5
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 25

Pro Ala Pro Ala Thr

1

5

<210> 26

<211> 709

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Primer

<400> 26

aacaacaacc tcgggatcga gggaggatt tcagaattca catattcaga tgcagacaga 60
ggttctattc aaattgaaat tgaacaactt acagatgaaa ttaacagagt tgctgatcag 120
gctcaataca accagatgca tatgttatct aacaaatcat ctgctaaaaa tgtaaaaact 180
gctgaagagc ttgaaatgca acctgcaaaa attaatacac cagcatcact aactggagca 240
caagcttcat ggacattgag agttcaggta ggtgcaaatac aggatgaagc aattgctgtt 300
aatattttct caactaatgt tgcaaatctt tttgggtggag aagggtgtca agcggctcca 360
gctcaagagg gtgcacaaca ggaaggagtt caaccagctc cagctcaagg tgggattagc 420
tctccaatta atgttacaac tgctattgtat gctaattgcat cgcttacaaa gattgaagat 480
gctatttagaa tggtaactga tcaaagagca aatcttggtg ctttccaaaa tagacttgag 540
tctgttaaag ctagcacaga ttatgctatt gaaaacttaa aagcgtctta tcgtcaaatt 600
aaagatgcaaa taatgacaga taaaattgtta gcatctacaa ccaacagttat tttgacacaa 660
tctgcaatgg ctatgattgc agtctagagt cgacctgcag gcaagctt 709

<210> 27

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Peptide

<400> 27

Ile Ser Glu Phe

1

<210> 28
<211> 641
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 28
acatattcag atgcagacag aggttctatt caaattgaaa ttgaacaact tacagatgaa 60
attaacagag ttgctgatca ggctcaatac aaccagatgc atatgttac taaacaatca 120
tctgctcaaa atgtaaaaac tgctgaagag cttggaatgc aacctgcaaa aattaataca 180
ccagcatcac taactggagc acaagcttca tggacattga gagttcaggt aggtgcaa 240
caggatgaag caattgctgt taatattttc tcaactaatg ttgcaa 300
gaaggtttc aagcggtcc agctcaagag ggtgcacaac aggaaggagt tcaaccagct 360
ccagctcaag gtgggattag ctctccaatt aatgttacaa ctgctattga tgcta 420
tcgcttacaa agattgaaga tgctattaga atggtaactg atcaaagagc aaatcttgg 480
gcttccaaa atagacttga gtctgttaaa gctagcacag attatgctat tgaaaactta 540
aaagcgtctt atgctcaa 600
accaacagta ttttgacaca atctgcaatg gctatgatgg c 641